

FIG. 1

HindIII

pKK223-3      TTTCACACAGGAAACAGAAATTCCTGGGGGATCCGTCGACCTGCAGCCAAAGCTT  
SEQ ID NO.: 285

pKK223-3N      TTTCACATAAGGAGGAAAAAaccatggGATCCG-----AAGCTT  
NcoI  
SEQ ID NO.: 286

FIG. 2A

Cloning Step 1

I   N   A   N   P   N   A   N   P   N   A   N   P   N   A   N   P   E   L  
A   ATT   AAC   GCT   AAT   CCG   AAC   GCT   AAT   CCG   AAC   GCT   AAT   CCG   AAC   GCT   AAT   CCG   GAG   CT  
TTG   CGA   TTA   GGC   TTG   CGA   TTA   GGC   TTG   CGA   TTA   GGC   TTG   CGA   TTA   GGC   C

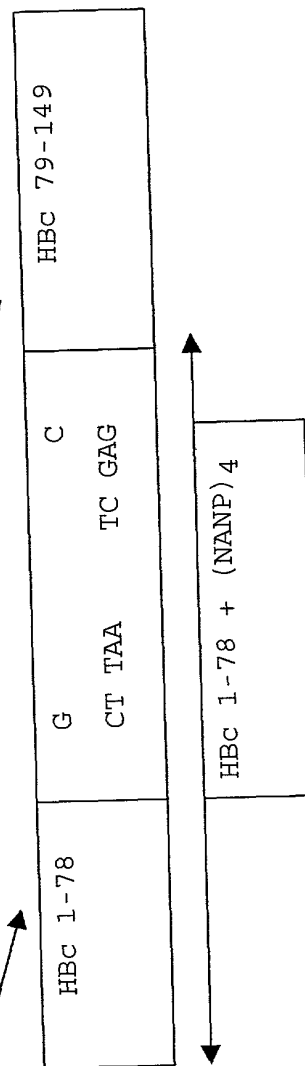


FIG. 2B

Cloning Step 2

I E Y L N K I Q N S L S T E W S P C S V T \*

A ATT GAA TAT CTG AAC AAA ATC CAG AAC TCT CTG TCC ACC GAA TGG TCT CCG TGC TCC GTT ACC TAA AAG CT

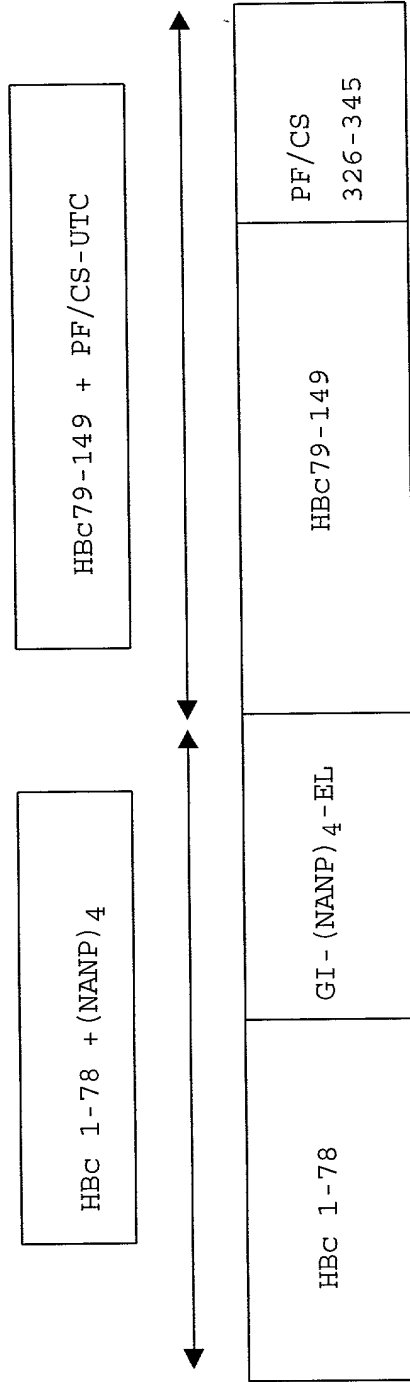
CTT ATA GAC TTG TTT TAG GTC TTG AGA GAC AGG TGG CTT ACC AGA GGC ACG AGG CAA TGG ATT T



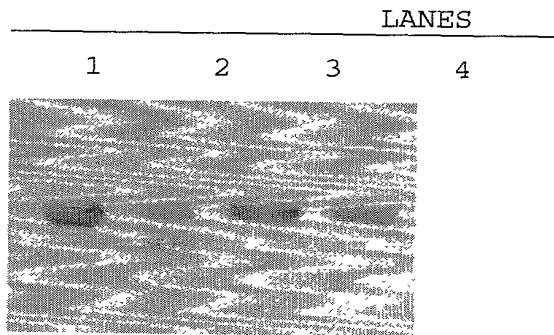
HBc79-149 + PF/CS326-345

FIG. 2C

cloning step 3



**FIG. 3**



**FIG. 4**

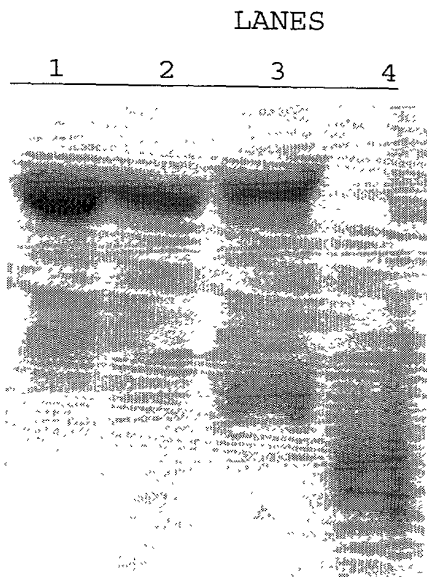
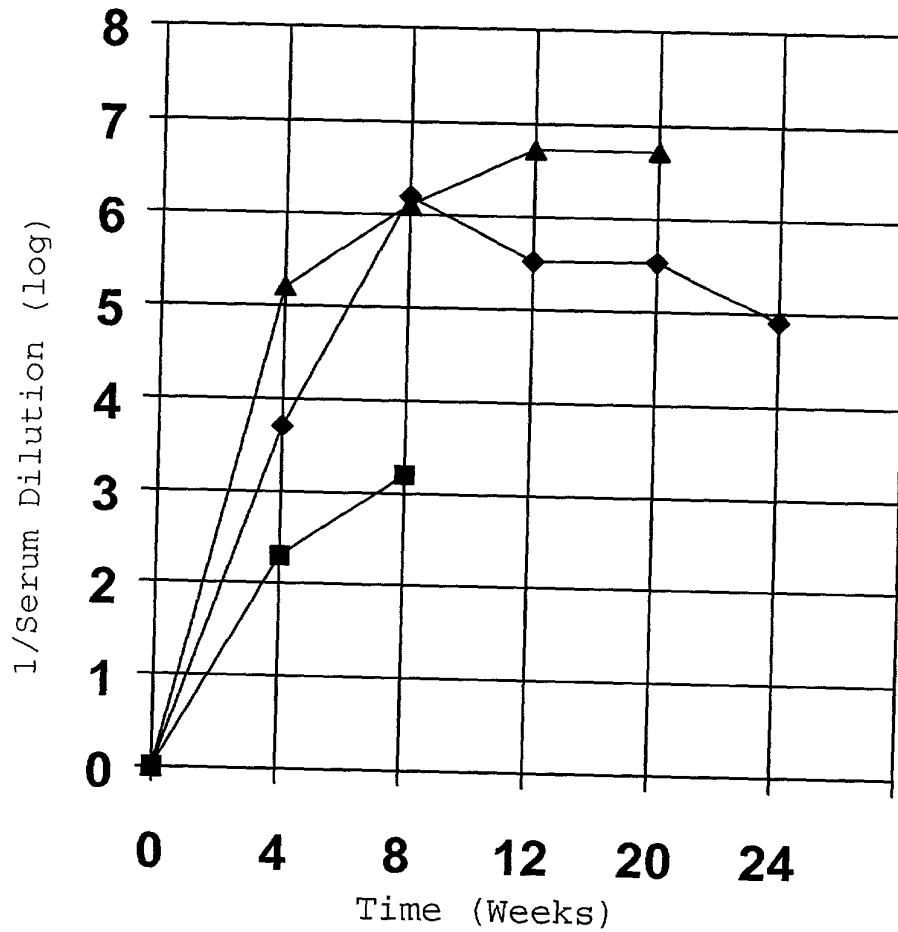


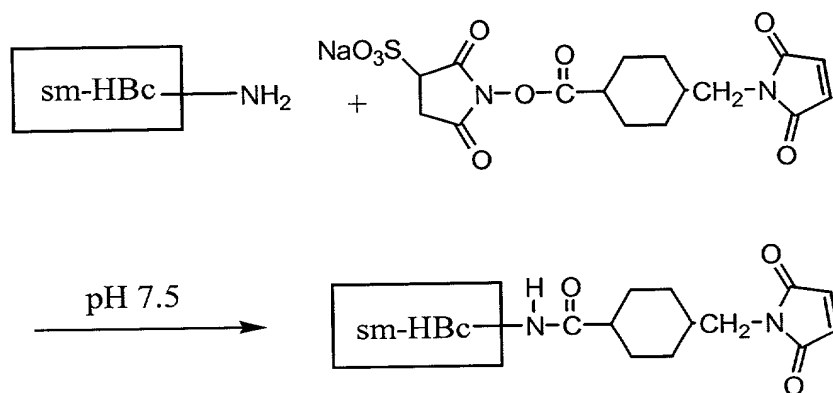
FIG. 5



**FIG. 6**

**Scheme 1**

**I**



**II**

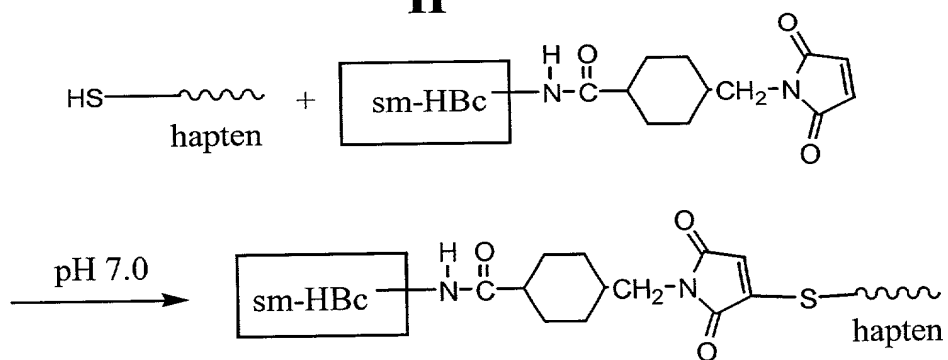


FIG. 7A

Ground Squirrel	mylfhlclvf acvpctvqa sklclgwlwd
	1
HBC AYW	mdidpykefg atvellsflp sdffpsvrdl ldtasalyre
HBC ADW	mdidpykefg atvellsflp sdffpsvrdl ldtasalyre
HBC ADW2	mdidpykefg atvellsflp sdffpsvrdl ldtasalyre
HBC ADYW	mdidpykefg atvellsflp sdffpsvrdl ldtasalyrd
Woodchuck	mdidpykefg ssyqlnflp ldffpdlnal vdtatalyee
Ground Squirrel	mdidpykefg ssyqlnflp ldffpdlnal vdtasalyee
	41
HBC AYW	alespehcsp hhtalrqail cwgelmtlat wvgvnledpa
HBC ADW	alespehcsp hhtalrqail cwgelmtlat wvgnnlqdp
HBC ADW2	alespehcsp hhtalrqail cwgelmtlat wvgnnledpa
HBC ADYW	alespehcsp hhtalrqail cwgelmtlat wvgtnledpa
Woodchuck	eltgrehcsp hhtairqalv cwdeltklia wmsnitseq
Ground Squirrel	eltgrehcsp hhtairqalv cweeltrlit wmsenttee

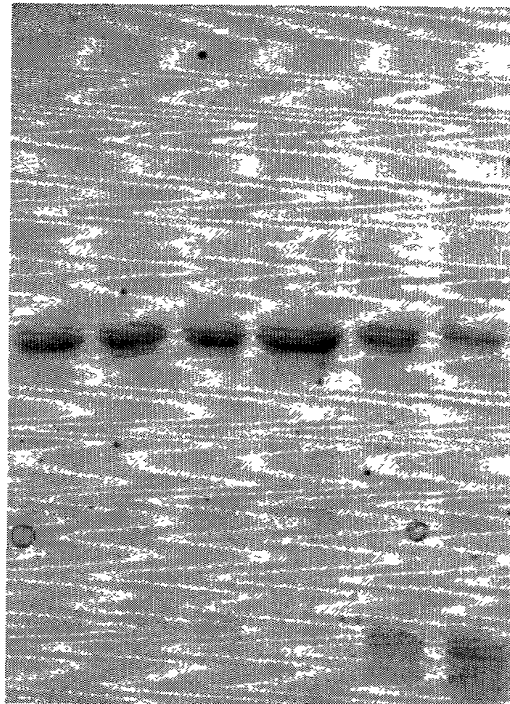
FIG. 7B

81	HBC AYW	srdlvvsyvn	tnmglkfrql	lwfhiscltf	gretvieylv
	HBC ADW	srdlvvnyvn	tnmglkirql	lwfhiscltf	gretvleylv
	HBC ADW2	srdlvvnyvn	tnvglkirql	lwfhiscltf	gretvleylv
	HBC ADYW	srdlvvsyvn	tnvglkfrql	lwfhiscltf	gretvleylv
	Woodchuck	vrliivnhvn	dtwglkvrqs	lwfhlsccltf	gqhtvqeflv
	Ground Squirrel	rrliivdhvnn	twglkvrqtl	wfhlsccltf	gqhtvqeflv
121	HBC AYW	sfgvwirtpp	ayrppnapil	stlpettvvr	rrgrsprrrt
	HBC ADW	sfgvwirtpp	ayrppnapil	stlpettvvr	rrdrgsprrr
	HBC ADW2	sfgvwirtpp	ayrppnapil	stlpettvvr	rrdrgsprrr
	HBC ADYW	sfgvwirtpp	ayrppnapil	stlpettvvr	rrgrsprrrt
	Woodchuck	sfgvwirtpa	pyrppnapil	stlpehtvir	rrggarasrs
	Ground Squirrel	fgvwirtpap	yrppnapils	tlpehtvirr	rggsraarsp
161	HBC AYW	psprrrrsqs	prrrrsqsre	sqc	
	HBC ADW	rtpsprrrrs	qsprrrrsq	resqc	
	HBC ADW2	rtpsprrrrs	qsprrrrsq	resqc	
	HBC ADYW	psprrrrsqs	prrrrsqsre	sqc	
	Woodchuck	prrrtpsprr	rrsqsprrrr	sqc	
	Ground Squirrel	rrrrtpsprr	rrsqsprrrr	qspasnc	



FIG. 8

<u>V12.Pf1</u>			<u>V12.Pf1 (C17A) C150</u>		
<u>DAYS</u>					
0	7	14	0	7	14



**FIG. 9**

**1 2 3 4 5**

